EXHIBIT A

Currently pending claims of U.S. Serial No. 08/663,618 filed June 14, 1996

1. A purified, isolated polynucleotide encoding the human chitinase amino acid sequence of SEQ ID NO: 2.

2. The polynucleotide of claim 1 which is a DNA.

3. The DNA of claim 2 comprising the protein coding nucleotides of SEQ ID NO: 1.

4. A purified, isolated polynucleotide encoding amino acids 1 to 445 of SEQ ID NO: 2.

5. The polynucleotide of claim 4 which is a DNA.

6. The DNA of claim 5 comprising nucleotides 65 to 1402 of SEQ ID NO: 1.

7. A purified, isolated polynucleotide encoding the human chitinase amino acid sequence of SEQ ID NO: 4.

8. The polynucleotide of claim 7 which is a DNA.

9. The DNA of claim 8 comprising the protein coding nucleotides of SEQ ID NO: 3.

10. A purified, isolated polynucleotide encoding amino acids 1 to 445 of SEQ ID NO: 4.

11. The polynucleotide of claim 10 which is a DNA.

12. The DNA of claim 11 comprising nucleotides 90 to 1427 of SEQ ID NO: 3.

13. [AMENDED] A purified, isolated human polynucleotide encoding human chitinase selected from the group consisting of:

(a) a double-stranded DNA comprising the protein coding portions of the sequence set out in SEQ ID NO: 1;

(b) a DNA which hybridizes under stringent conditions to a non-coding strand of the DNA of (a); and

(c) a DNA which, but for the redundancy of the genetic code, would hybridize under stringent conditions to a non-coding strand of DNA sequence of (a) or (b).

14. The polynucleotide of claim 13 which is a DNA.

15. A vector comprising the DNA of claim 2, 3, 5, 6, 8, 9, 11, 12, or 14.

16. The vector of claim 15 that is an expression vector, wherein the DNA is operatively linked to an expression control DNA sequence.

17. A host cell stably transformed or transfected with the DNA of claim 2, 3, 5, 6, 8, 9, 11, 12, or 14 in a manner allowing the expression in said host cell of human chitinase.

18. A method for producing human chitinase comprising culturing the host cell of claim 17 in a nutrient medium and isolating human chitinase from said host cell or said nutrient medium.